

REMARKS

The Examiner is thanked for the careful examination of the application.

However, in view of the following remarks, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections.

Claims 1-5 are pending. By this Amendment claims 1-5 and the specification are amended to correct informalities noted by the Examiner.

The Office Action objects to the drawings. Specifically, the Office Action indicates that reference number 17 and reference number S58 are not mentioned in the specification. Applicants note that reference number 17 is included in the specification at least in paragraph 33. Further, Applicants have amended the specification at paragraph 58 to include the recitation of step 58.

The Office Action objects to the specification. Specifically, the Office Action objects to the abstract and informalities in the specification located at paragraphs 13 and 58. The abstract and specification are amended to obviate this objection.

The Office Action objects to claims 1-5 due to informalities. Claims 1-5 are amended to obviate these objections.

The Office Action rejects claims 1-5 under 35 U.S.C. §112 second paragraph for failing to provide antecedent basis for "specific tile size." Claims 1, 4 and 5 are amended to obviate this rejection.

The Office Action rejects claim 2 under 35 U.S.C. §101 as being directed to non-statutory subject matter. Claim 2 is amended to be in proper U.S. patent practice format.

The Office Action rejects claims 1-3 and 5 under 35 U.S.C. §103(a) over U.S. Publication No. 2004/0141650 to Hansson et al. in view of U.S. Publication No.

2002/0154826 to Okada and claim 4 under 35 U.S.C. §103(a) over Hansson in view of U.S. Patent No. 6,978,048 to Higginbottom et al. These rejections are respectfully traversed.

The Office Action relies on Hansson for allegedly teaching that if the processor of Hansson is not occupied by a heavy task, the selector selects a first process and uses the internal memory and if the processor is heavily occupied by another task the selector selects a second processor using the external memory. Applicants respectfully disagree with this observation. Instead, as discussed in paragraph 23 of Hansson if the processor is heavily occupied by other tasks the internal memory will be correspondingly occupied and little free internal memory will be available. Thus, a portion of the image data to be processed will be of a size corresponding to the relatively small free memory and will be transferred from the external memory to the internal memory for processing. However, if the processor is not occupied by heavy tasks there will be large free internal memory available. A portion of image data to be processed of a size corresponding to the relatively large free memory will be transferred from the external memory to the internal memory for processing. Thus, Hansson discloses that all of the processing is performed in the internal memory. Hansson does not disclose a first process using only components constituting the JPEG 2000 Hardware Encoder/Decoder and a second process using other components than the components constituting the JPEG 2000 Hardware Encoder/Decoder in combination with the other claimed features of independent claims 1, 4 and 5. As stated above, all the image data will be transferred to the internal memory for processing.

Further, because Hansson always uses the internal memory for processing Hansson does not disclose a determiner for determining whether the tile size can be processed using only components constituting the JPEG 2000 hardware encoder or not, as in independent claims 1, 4 and 5.

Okada does not provide the deficiencies of Hansson noted above. In Okada an intermediate image is generated during the coding process and is saved and reused. An image selecting unit selects either the original image or the intermediate image according to a particular use of the image. For explanatory purposes, as discussed in Applicants' specification, it is determined whether the tile size can be processed using only hardware components for wavelet transform, for example, JPEG 2000 hardware encoder 20 and memory 15 for wavelet transform and inverse transform. When it is determined that the tile size can be processed, the transform process is performed using the hardware components. When it is determined that the tile size cannot be processed, a second process using software 17, for example, is selected for the transform process.

Higginbottom does not provide the deficiencies of Hansson and Okada described above.

Claims 2 and 3 depend from claim 1 and are thus also patentable over the prior art, at least for the reasons set forth above with respect to claim 1.

In view of the foregoing remarks, the Examiner is respectfully urged to reconsider and withdraw the outstanding rejections.

In the event that there are any questions concerning this response, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

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